

Summer forecasts—reliability and impacts

by Tyler Carlson

At a recent transmission system workshop, the Arizona Corporation Commission asked utilities to look into their crystal balls and answer one simple question: will there be enough electricity to meet load this summer? They also wanted to hear our views on industry restructuring, and in particular, on the DesertSTAR Independent System Operator and the Arizona Independent Scheduling Administrator.

Enough juice?

Western cannot directly answer the question, “will generation match load?” We don’t serve loads. We market and transmit (primarily) firm power contracts to entities that serve load. So our answer to that question must be cast in terms of marketing and transmission, and the answer is “yes.”

Currently, we have excess capacity on some segments of our transmission system or have alternative lines to meet firm power commitments. Moreover, we’re involved in many projects that will enhance our capacity, inject new generation into the system or increase our wholesale customers’ distribution capabilities.

What’s going on?

In southern Arizona, between now and FY 2006, we’ll be involved in three major projects to upgrade transmission lines. In the South of Phoenix Project, the Lone Butte, Maricopa and Casa Grande line will be fully upgraded to 230-kV.

In the multi-staged South of Parker-West Project, existing wooden poles on the Gila-Knob line will be replaced with 230-kV-capable steel structures. The Blythe-Gila line will be upgraded to 230-kV. And on the South of Parker-East Project, the Parker-Bouse-Kofa-Gila line’s wooden poles will be replaced with 230-kV-capable steel structures. By increasing capacity on these lines, we’ll have more opportunities to transmit excess power, while still meeting our firm power commitments. This will ease congestion currently occurring in several distribution areas.

We are also working closely with numerous merchant powerplant projects that will add 1.11 million-kW to the open market. Projects such as the Griffith Energy Project near Kingman, Ariz., also call for the construction of new substations, additional tap-

lines and reconductoring to increase capacity. To date, a total of 4 merchant plant projects have requested interconnections with Western’s transmission system located in Arizona.

Finally, we have worked closely with Citizen’s Utility Company to design and rebuild a Nogales, Ariz., switchyard to resolve local reliability issues. And we are conducting power quality studies in Yuma to lessen impacts of voltage drops caused by faults—a reliability issue affecting the entire Yuma area.

In short, Western continues to play a leading role in system reliability in the Desert Southwest.

What about restructuring?

We are also playing a key role in regional restructuring. We’ve participated in the development of the DesertSTAR ISO and Arizona ISA. As DesertSTAR develops, it hopes to expand into a regional transmission organization. To do so, it must provide the four minimum characteristics and eight minimum functions of an RTO (see p.1). It intends to file for RTO status this fall.

In contrast, the Arizona ISA primarily deals with retail access. However, the ISA has expanded its operation to include decisions on available transmission capacity and total transfer capability. These issues lie in the domain of wholesale transmission. The ISA, a temporary scheduling entity for retail access, was designed to last five years or until DesertSTAR was operational. I believe the new roles it has taken on exceed the ISA’s intended scope and duplicate functions of the DesertSTAR.

My greatest concern is that large sums of money will be invested in these expanded roles, only to have more money reinvested into DesertSTAR. This is not fair to Arizona customers. The ISA’s focus should remain at the retail access level.

Like many new entities developing in response to restructuring, the evolutionary road for both DesertSTAR and the Arizona ISA has been bumpy. Nonetheless, we will continue to work with these organizations. We will be an active player as the power industry continues to change.

(Note: Carlson is DSW regional manager.)